

HI96704

# Hydrazine Portable Photometer

- **CAL Check™**
  - Allows for performance verification and calibration of the meter using NIST traceable standards.
- **GLP**
  - Review of the last calibration date.
- **Auto-shut off**
  - Automatic shut off after 10 minutes of non-use when the meter is in measurement mode. Prevents wastage of batteries in the event the meter is accidentally left on.
- **Battery status indicator**
  - Indicates the amount of battery life left.
- **Built-in timer**
  - Display of time remaining before a measurement is taken. Ensures that all readings are taken at the appropriate reaction intervals for the test being performed.
- **Error messages**
  - Messages on display alerting to problems including no cap, high zero, and standard too low.
- **Cooling lamp indicator**
  - To maintain the desirable wavelength to be used for absorbance, it is necessary to ensure components are not overheated from the heat generated by the tungsten lamp. Each photometer is designed to allow a minimal amount of time for components to cool. The cooling lamp indicator is displayed prior to a reading being taken.
- **Units of measure**
  - Appropriate unit of measure is displayed along with reading.

The HI96704 portable photometer is for the measurement of hydrazine. Hanna's portable photometers feature an advanced optical system; the combination of a special tungsten lamp, a narrow band interference filter, and silicon photodetector ensure accurate photometric readings every time. The Hanna exclusive CAL Check feature utilizes ready-made, NIST traceable standards to verify both meter validation and calibration. The exclusive cuvette locking system ensures that the cuvette is inserted into the measurement cell in the same position every time to maintain a consistent path length.



## Significance of Use

Hydrazine is a liquid chemical substance normally used in high pressure heating plants because of its properties as an oxygen inhibitor, helping to avoid scaling and corrosion in the plant itself. Hydrazine reacts with dissolved oxygen to yield nitrogen and water; this is an advantage over the sulfite treatment because it does not produce any dissolved solids in the boiled water. Hydrazine is also used as an energy source in fuel elements, as a reducing agent for metal recovery, and as an intermediate in the production of insecticides, herbicides, pharmaceuticals, and many other chemical products.

Specifications	HI96704 Hydrazine
Range	0 to 400 µg/L (ppb)
Resolution	1 µg/L
Accuracy @25°C (77°F)	±3% of full scale
Light Source	light emitting diode
Light Detector	silicon photocell with narrow band interference filter @ 466 nm
Power Supply	9V battery
Auto-off	after ten minutes of non-use in measurement mode; after one hour of non-use in calibration mode; with last reading reminder
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	192 x 104 x 69 mm (7.6 x 4.1 x 2.7")
Weight	320g (11.3 oz.)
Method	adaptation of the ASTM Manual of Water and Environmental Technology, method D1385-88 for natural and treated water
Ordering Information	<b>HI96704</b> is supplied with sample cuvettes (2) with caps, 9V battery, instrument quality certificate and instruction manual. <small>CAL Check standards and testing reagents sold separately</small>
	<b>HI96704C</b> includes photometer, CAL Check standards, sample cuvettes (2) with caps, 9V battery, cuvette wiping cloth, instrument quality certificate, instruction manual and rigid carrying case. <small>Reagents sold separately</small>
Reagents and Standards	<b>HI96704-11</b> CAL Check standard cuvettes
	<b>HI93704-01</b> reagents for 100 tests
	<b>HI93704-03</b> reagents for 300 tests